



Technical University of Crete

TUC/MUSIC (<http://www.music.tuc.gr>) was established in 1990 in the Dep. of Electronics and Computer Engineering of the Technical University of Crete, Chania, Crete, Greece. It is a centre of research, development and teaching in the areas of distributed information systems, application engineering, computer graphics, and simulation engineering.

TUC/MUSIC performs research in the areas of high performance distributed multimedia architectures, information systems offering advanced functionalities, data base systems, information retrieval systems, digital libraries, service oriented architectures, and graphics systems.

In the area of application engineering, TUC/MUSIC performs research in the topics of large distributed multimedia delivery networks for intelligent TV applications, semantic interoperability infrastructures, web and mobile based application development methodologies, natural language processing, as well as standard-based software infrastructures for multimedia applications in areas such as e-learning, culture and tourism, business applications, TV Applications and medicine. It also has extensive experience in usability aspects of modern applications, the design of intuitive and efficient graphical user interfaces both for the desktop and the web, and their evaluation following standard methodologies.

TUC/MUSIC has participated in over 50 EU projects and Excellence Networks. In many of these projects it was the Prime Contractor and/or Technical Leader.

TUC/MUSIC has extensive experience in interoperability issues between digital libraries and eLearning applications, usage of eLearning standards such as LOM, SCORM, IMS LD, IMS QTI to build modern ubiquitous learning systems as well as to support distant learning and blended learning educational activities. It has developed the MOLE platform for supporting and managing learning processes exploiting modern multimedia and communication technologies. MOLE supports the courses in the Technical University for several years and used in several projects (pSkills, Organic.Mednet, NaturalEurope). Based on the experience of MOLE, the Coursevo platform (<http://coursevo.com/>) was recently developed and currently used in several EU projects. Coursevo is the backbone of the e-ARTinED community portal (<http://eartined.coursevo.com/>) incorporating new features and services specially designed and implemented for the e-ARTinED project needs exploiting also the experience from MyODS, a platform supporting community portals (MyODS) and alignment of external tools within the Open Discovery Space (ODS) project.

TUC/MUSIC also designs and implements learning scenarios focusing, among others, to the responsible use of ICT, educating parents to enable them participate with their children in the modern digital culture, promoting intergenerational dialogue and understanding, promoting media literacy (including issues related to digital games and new media arts) etc. Within this line of work, TUC/MUSIC has promoted programming courses in secondary education and provided a

pedagogically sound approach to exploit modern educational programming languages to make them viable, attractive and effective. It also has experience in design, development and educational evaluation of creativity platforms and systems promoting interdisciplinary learning in primary and secondary education employing arts in teaching of diverse school subjects ranging from mathematics and sciences to language, history and social sciences. Based on its extensive experience on these topics, TUC/MUSIC is also responsible for the e-ARTinED pilot activities in Greek schools with special emphasis on the use of new media arts in teaching all school subjects.